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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,990	09/22/2003	Daniel P. Cram	00-0557.2	1948

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EXAMINER

KARLSEN, ERNEST F

ART UNIT PAPER NUMBER

2829

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

**Application No.**

10/667,990

**Applicant(s)**

CRAM, DANIEL P.

**Examiner**

Ernest F. Karlsen

**Art Unit**

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0903 0605.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 23-25, 27, 28, 30-32, 34, 35, 37, 38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Suyama et al. With regard to claims 21, 25, 27, 30 and 31, Suyama et al show in Figure 7 the provision of a board 91 with a plurality of contacts in electrical communication with test circuitry, the provision of a substrate 92B on the board, provision of a plurality of test contactors (the pins in substrate 92B) on the substrate having first contacts including a first polymer layer 92C to engage the terminal contacts and second contacts including a second polymer layer 92A in communication with the contacts that engage test circuitry, placing the component 94 on the substrate 92B wherein the contacts on the component 94 are in electrical communication with first contacts on the substrate 92B and second contacts on the substrate 92B are in communication with contacts that are in communication with test circuitry and applying test signal via the board 91. With regard to claims 32, 34, 35, 37, 38 and 40, the pins in substrate 92B are considered flexible segments in that they can move relative to the substrate 92B. With regard to claim 23, the method of Suyama et al includes the application of force. With regard to claims 24 and 28, the pins in the substrate 92B are considered to float.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suyama et al in view of Gleason et al. Suyama et al show that claimed except for grooved structure to allow adaptation to contact height differences. Gleason et al show grooved contact support structure to allow adaptation to contact height differences. It would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted the grooved substrate technique of Gleason et al for the height adaptation feature of Suyama et al because one skilled in the art would realize that so doing would result in a saving in provision time.

Claims 26 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suyama et al in view of Ohno. Suyama et al show that claimed except for a test handler. Ohno shows the use of a test handler in a test apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention to have adapted the test handler of Ohno for use with the apparatus of Suyama et al because one of ordinary skill in the art would realize that so doing would enable increased throughput when using the apparatus of Suyama et al.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suyama et al in view of Yamaguchi. Suyama et al show that claimed except for gold contacts. Yamaguchi shows the use of gold contacts in a probing device. (See Figure 4, element 44.) It would have been obvious to one of ordinary skill in the art at the time of the invention to have adapted the gold contact feature of Yamaguchi to the apparatus of Suyama et al because one of ordinary skill in the art would realize that so doing would enable more reliable contact.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suyama et al in view of Ference et al. Suyama et al show that claimed except for conductive particles in contacts to penetrate. Ference et al show the use of conductive particles in contacts to penetrate. (See Figure 17, element 67.) It would have been obvious to one of ordinary skill in the art at the time of the invention to have adapted the conductive particle in contacts to penetrate feature of Ference et al to the apparatus of Suyama et al because one of ordinary skill in the art would realize that so doing would enable better contact.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arai and Driller et al are cited to show additional methods similar to that of Suyama et al.

Any inquiry concerning this communication should be directed to Ernest F. Karlson at telephone number 571-272-1961.

Ernest F. Karlson

August 8, 2005

  
ERNEST KARLSEN  
PRIMARY EXAMINER